Can Eco and Edu-tourism help Science Centers become more sustainable?

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What do Science Centers, Ecotourism and Sustainable Tourism share in common?

Science Centers are

- Local tourist attractions.
- Expressions of local, national and global cultural pride
- Places that offer opportunities to explore and discover new ways of seeing, thinking and doing

How big is the world tourism industry?

It is the world's largest. \$6 Trillion in 2011.

Largest Employer. 260 Million jobs or 1 out of 12 globally.

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Key source of foreign exchange for 1/3rd of developing countries and 1/2 for less developed counties

By 2020, 1.6 billion people will travel and will have impacts on their tourist destinations

Climate is a major driver of tourism

Each year millions of vacation seekers from northern developed nations migrate south to warmer climates

or to snow capped mountains.

But in return Climate Change is affected by global tourism

Tourism is directly responsible for about 5% of energy-related
CO2 emissions. Approximate to the chemical industry
Tourism industry emissions unevenly distributed are 75% transportation, of which

• air transport accounts for 40%

automobile traffic 32%
 21% accommodations (WRI, 2005)

• **Business-as-usual** scenarios for global emissions forecast about **250% increase by 2035 compared** to 2005 levels

Tourism's potential to support Sustainable Development Goals.

2020, 1.6 billion people will travel to tourist destinations.

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 Only 1.4% of natural environments contain more than 44% of all plant, 35% of mammals, bird, reptile, and amphibian species diversity

 These areas also house more than 1 billion people below the poverty line. *Ecotourism* comes into being in the 1980s following the emergence of the concept of *Biodiversity*.

2006, the New York Times selects "Ecotourism" buzzword of the year.

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"Eco-tourism -travel that preserves the environment and promotes the welfare of the local people – continues to gain momentum. Impressed by the success of countries like Costa Rica and Ecuador, which have lured flocks of travelers for mountain treks and jungle safaris, a growing number of regions across the globe are turning to ecotourism as a strategy for economic growth". (Higgins, 2006)

UN International Year of Tourism 2002, a turning point

UNIYT 2002 recognized tourism as a stimulus to sustainable development.

World Bank & donor nations placed tourism as a development agenda aligned with the Millennium Development Goals.

In developing countries, tourism represents over 10% of GDP, and even more in some least developed countries.

The Convention on Biodiversity in Nagoya, Japan 2010, notes a need to change from "do no harm" to "do measurable good"

At the opening Robert B. Zoelick, president of the World Bank Group, states

"...successful conservation of our natural resources, our ecosystems, and our biodiversity is central to addressing all development challenges and to improving the lives of the poor" In recognition of both need and potential, the UN declares 2017 International Year of Sustainable Tourism Development

To help develop this vital economic sector under the guidelines of the UN's 17 *Sustainable Development Goals* (SDGs).

Centrally to

- protect valuable cultural heritage
 - critical natural habitat
 - end poverty

Definitions. Healthy tourism considers the interconnectedness of humans, commerce, and the environment

- Ecotourism. Ecologically responsible, socially compatible, culturally appropriate, politically equitable, technologically supportive, and finally economically viable for the host community" Choi and Sirakava, 2005
- Edutourism. Supports the conservation of local habitats and indigenous cultures through the development of educational opportunities that are consistent with the needs of institutions of higher education.

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• Voluntourism. Supports the conservation of local habitats and indigenous cultures through the development of working activities to provide locales with needed services in return for culturally enriching experiences. Citizen Science enters the scene.

"With a growing awareness of ... climate change, deforestation, and loss of natural resources, more travelers have started to seek ways to minimize their footprint and maximize their positive impact..." Sustainable Tourism and the Millenium Development Goals Kelly Bricker, Rosemary Black, Stuart Cottrell Jones & Bartlett Publishers, 2012.

Sustainable tourism." tourism which leads to management of all resources in such a way that economic, socal and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity and life support systems" (UNWTO, 1997).

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Greenwashing. Provides the appearance of supporting local cultural and environmental needs but falls vastly short of providing a sustaanable model consistent with the spirit and intentions of the work of UNWTO and UN's Sustainable Development Goals.

Reference and further reading

Sustainable Tourism and the Millenium Development Goals

Kelly Bricker, Rosemary Black, Stuart Cottrell

Jones & Bartlett Publishers, 2012.

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Q1. Tell us about establishing ecotourism in your region under UNWTO's guidance?



Q 2. What is the value and importance of ecotourism?



Q3. Is ecotourism gaining public popularity?



Q4. How can I be sure of becoming a good ecotourist?



Q5. Do Science Centers and Ecotourism have things in common?



Q6. Should Science Centers and Ecotourism collaborate?



Q7. Can Science Centers help establish better sustainable tourism practices?



Q8. Can you see Science Centers serving as Gateways to ecotourism?



Q9. Are children important to the future of ecotourism?



Q10. Does the future look bright for Ecotourism, Science Centers and Sustainability?

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